

CLEAN VERSION OF AMENDED SPECIFICATION PARAGRAPHS

On page 4, please replace paragraph 3 with the following entry:

A1 In an embodiment of the present invention, a method for detecting a pulldown technique is disclosed. The method includes sequentially comparing adjacent pairs of frames of a video sequence to detect relatively high values and relatively low values of at least one frequency component of said adjacent pairs of frames and determining that the video sequence was produced by a 3:2 pulldown technique when a repeating pattern of the adjacent pairs is high/low/high/low/low values. Up to this time, two separate techniques were needed to detect 2:2 pulldown sequences and 3:2 pulldown sequences. Advantageously, now only one method can be used to detect either type of pulldown sequence.

On page 5, please replace paragraph 2 with the following entry:

A2 In an additional embodiment of the present invention, a method for detecting source-type sequence breaks in a video stream is disclosed. The method includes sequentially comparing adjacent pairs of frames of a video sequence to detect relatively high values and relatively low values of at least one frequency component of the adjacent pairs of frames and detecting source-type sequence breaks by analyzing a pattern of the relatively high and low values of at least one frequency component.

On page 11, please replace the first full paragraph with the following entry:

A3 Restated, a method for detecting a pulldown technique is accomplished by sequentially comparing adjacent pairs of frames of a video sequence to detect relatively high values and relatively low values of at least one frequency component (relative in terms of a low value to a high value) of the adjacent pairs of frames and determining that the video sequence was produced by a 3:2 pulldown technique when a repeating pattern of said adjacent pairs is high/low/high/low/low values. The method can also be used to determine that the video sequence was produced by a 2:2 pulldown technique when the repeating pattern is high/low/high/low values.

On page 15, please replace the fourth full paragraph with the following entry:

A4 For a 2:2 pulldown technique, the threshold detection level is determined by

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determining that the pulldown technique is 2:2, obtaining a first, second and third previous frequency detection value and dynamically adjusting a threshold detection level based on the first, second and third previous frequency detection values.

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On page 15, please replace the fifth full paragraph with the following entry:

Dynamically adjusting the threshold detection level includes calculating a new threshold detection level by verifying that a 2:2 pulldown lock has not occurred, verifying that the first and third previous frequency detection values are low, obtaining an average of the first and third previous frequency detection values, obtaining the magnitude of the difference between the average and the second previous frequency detection value, dividing by 2 and adding to an immediately preceding calculated threshold level.

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On page 16, please replace the first full paragraph with the following entry:

Dynamically adjusting the threshold detection level includes calculating a new threshold detection level is determined by verifying that a 2:2 pulldown lock has not occurred, verifying that the first and third previous frequency detection values are high, obtaining an average of the first and third previous frequency detection values, obtaining the magnitude of the difference between the average and the second previous frequency detection value, dividing by 2 and subtracting from an immediately preceding calculated threshold level.

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On page 16, please replace the second full paragraph with the following entry:

Dynamically adjusting the threshold detection level includes calculating a new threshold detection level is determined by verifying that a 2:2 pulldown lock has occurred, verifying that the first and third previous frequency detection values are low, obtaining an average of the first and third previous frequency detection values, obtaining the magnitude of the difference between the average and the second previous frequency detection value dividing by 4 and adding to an immediately preceding calculated threshold level.

On page 16, please replace the third full paragraph with the following entry:

A8 Dynamically adjusting the threshold detection level includes calculating a new threshold detection level is determined by verifying that a 2:2 pulldown lock has occurred, verifying that the first and third previous frequency detection values are high, obtaining an average of the first and third previous frequency detection values, obtaining the magnitude of the difference between the average and the second previous frequency detection value, dividing by 4 and subtracting from an immediately preceding calculated threshold level.

On page 18, please replace the fourth full paragraph with the following entry:

A9 It will therefore be appreciated that a method for processing a progressive source interlaced video stream includes deinterlacing the interlaced video stream to create a progressive video stream, determining a confidence level (quality level) with respect to the progressive video stream and post processing the progressive video stream based upon the determined confidence level. When the confidence level is below about a first threshold, no action is taken to improve the video sequence. When the confidence level is above about the first threshold but below about a second threshold, an interlace artifact removal process is initiated. When the confidence level is above the second threshold, the video source is processed as a non-progressive source. The confidence level is determined by combining at least two of the following elements: a field difference pair history value, a field difference noise filter low threshold value, a source type transition type count value, a sequence of frequency detection values and a ratio of high to low frequency detection values.

On page 20, please replace the third full paragraph with the following entry:

A10 It will therefore be appreciated that a method for detecting source-type sequence breaks in a video stream includes sequentially comparing adjacent pairs of frames of a video sequence to detect relatively high values and relatively low values of at least one frequency (relative in relation to each other) component of the adjacent pairs of frames and detecting source-type sequence breaks by analyzing a pattern of the relatively high and low values of at least one frequency component. The detection of source-type sequence breaks comprises obtaining a frequency detection value, calculating a sum of a number of previous frequency detection values, determining that a source-type sequence break has occurred if the frequency detection value is

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greater in magnitude than the sum and the frequency detection value is greater than a given threshold. The detection of source-type sequence breaks comprises obtaining a frequency detection value, obtaining a field difference value, calculating a sum of a number of previous field difference values, comparing the frequency detection value with two previous frequency detection values and determining that a source-type sequence break has occurred if the field difference value is larger than the sum and larger than a given threshold and the frequency detection is larger than the two previous frequency detection values. The detection of source-type sequence breaks comprises obtaining a high magnitude frequency detection value, obtaining a low magnitude frequency detection value, calculating an average of a number of previous frequency detection values, comparing the high magnitude and low magnitude frequency detection values with the average and determining that a source-type sequence break has occurred if the high magnitude frequency value is less than the average or the low magnitude frequency detection value is greater than the average.

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